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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,412	07/08/2004	Robert L. Bingle	71483-0014	5107
20915 7590 04/25/2008 MCGARRY BAIR PC 32 Market Ave. SW SUITE 500 GRAND RAPIDS, MI 49503			EXAMINER HENDERSON, ADAM	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/710,412

Applicant(s)

BINGLE ET AL.

Examiner

ADAM L. HENDERSON

Art Unit

2622

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) 31-46 and 48-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-30, 47, 51-55 and 58-60 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 56 and 57 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-30, 47, and 51-60, drawn to a camera system wherein an IR filter is moved in and out of the optical path, classified in class 348, subclass 360.
 - II. Claims 31-50, drawn to a camera system wherein a filter selectively attenuates IR radiation without ever leaving the optical path, classified in class 348, subclass 342.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because Invention I does not require a stationary filter as per Invention II, likewise Invention II does not require a moveable filter as per Invention I. The subcombination has separate utility such as Invention II has separate utility in camera systems with limited space which may not have the room needed for moving a filter in and out of the optical path.

The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the

allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

3. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include

(i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected invention.**

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

4. During a telephone conversation with Mike Kelly on 31 March 2008 a provisional election was made without traverse to prosecute the invention of Invention I, claims 1-30, 47, 51-60. Affirmation of this election must be made by applicant in replying to this Office action. Claims 31-46 and 48-50 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 17 recites the limitation "the at least one light source". There is insufficient antecedent basis for this limitation in the claim.

Examiner believes Applicant may have intended this claim to be dependant upon Claim 16 rather than Claim 14 as currently written, amending as such would resolve the current lack of antecedent.

9. Claims 18-20 recite the limitation "the light emitting diode". There is insufficient antecedent basis for this limitation in the claim.

Examiner believes Applicant may have intended these claims to be dependant upon Claim 17 rather than Claim 15 as currently written, amending as such would resolve the current lack of antecedent.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1, 2, 7, 10, 13-18, 24, 26, 27, 47, 51, 52, 55, and 58-60 are rejected under 35 U.S.C. 102(b) as being anticipated by Sekiguchi (US Patent 5,982,423).

12. With regard to claim 1 Sekiguchi discloses an imaging system for use in an exterior or interior of a vehicle (intended use and thus given no patentable weight), the imaging system comprising:

a camera having an optical sensor with an associated optical path (ccd element 3, FIG. 1)
and

an infrared filter associated with the image sensor for attenuating infrared radiation (infrared rays cutting filter 2, FIG. 1);

wherein the infrared filter is moveable from a first position, wherein the infrared filter is disposed in the optical path of the image sensor for preventing transmission of the infrared radiation to the image sensor, and a second position, wherein the infrared filter is spaced from the optical path of the image sensor and does not prevent transmission of the infrared radiation to the image sensor (column 3 line 66—column 4 line 4).

13. With regard to claim 2 Sekiguchi discloses wherein the infrared filter moves as a result of an output of the camera, wherein the output is indicative of light conditions in a viewing area of the camera (column 3 line 66—column 4 line 30).

14. With regard to claim 7 Sekiguchi discloses wherein when the output is less than a first threshold, the infrared filter is in the first position, and when the output is greater than a second threshold, the infrared filter is in the second position (column 3 line 50 - column 4 line 61) [while there is no expressly disclosed first and second threshold, it is disclosed that the filter is in place during high illuminance and the filter is not in the optical path during low illuminance, in order to determine what is high and what is low there must inherently be some threshold saying anything above this value is high illuminance and anything below this second threshold is considered low illuminance, without those there would be no definitive method of determining the illuminance level].
15. With regard to claim 10 Sekiguchi discloses wherein the infrared filter automatically moves between the first position and the second position as a result of light condition in a viewing area of the camera (column 3 line 66 – column 4 line 30) [no user interaction is disclosed as being necessary].
16. With regard to claim 13 Sekiguchi disclose wherein the camera further comprises an infrared filter holder for mounting the infrared filter to the camera [it is inherent that there is a filter holder, if there were no filter holder then the filter would not stay in the designated place].
17. With regard to claim 14 Sekiguchi discloses wherein the infrared filter holder pivots relative to the image sensor to move the infrared filter between the first position and the second position (FIG. 2C and 2D, column 5 lines 14-33).
18. With regard to claim 15 Sekiguchi discloses wherein the image sensor comprises a focal length, and the infrared filter has a thickness that does not substantially change the focal length of the image sensor as the infrared filter moves between the first position and the second position

(column 3 line 66 - column 4) [all optical systems inherently have a focal length, further it is disclosed that the filter 2 and the glass 9, which are interchanged, are designed such that they do not change the optical path when they are interchanged; the focal length is part of the optical path].

19. With regard to claim 16 Sekiguchi discloses further comprising a supplemental illumination system comprising at least one light source for providing supplemental illumination to a viewing area of the camera (infrared rays emitting unit 8, FIG. 1).

20. With regard to claim 17 Sekiguchi discloses wherein the at least one light source comprises a light emitting diode (column 3 lines 42-45).

21. With regard to claim 18 Sekiguchi discloses wherein the light emitting diode is an infrared light emitting diode (column 3 lines 42-45).

22. With regard to claim 24 Sekiguchi discloses wherein the camera and the supplemental illumination system for a unitary module (column 1 lines 55-67 and column 2 lines 18-28) [the illumination system is disclosed as being part of the photographing device, thus a unitary module].

23. With regard to claim 26 Sekiguchi discloses wherein the supplemental illumination system is selectively actuatable when the imaging system is activated (column 5 lines 41-48).

24. With regard to claim 27 Sekiguchi discloses wherein the supplemental illumination system is selectively actuatable when the infrared filter is automatically positioned in one of the first position and the second position in accordance with light conditions in a viewing area of the camera (column 5 lines 41-48 and column 4 lines 11-20) [the filter only has the two claimed

positions and the selection of the position is based on light, further the illumination system is selectively actuatable].

25. With regard to claim 47 Sekiguchi discloses an imaging system for use in an exterior or interior of a vehicle (intended use therefore the vehicle limitations are given no patentable weight), the imaging system comprising:

a camera having an associated optical path and viewing area (FIG. 1) [all cameras have an optical path and viewing area]; and

an infrared filter associated with the image sensor for selectively attenuating infrared radiation (infrared rays cutting filter 2, FIG. 1);

wherein the infrared filter is automatically responsive to light conditions in the viewing area such that the infrared filter prevents the image sensor from being exposed to infrared radiation when light conditions in the viewing area correspond to daylight conditions and does not prevent the image sensor from being exposed to infrared radiation when the light conditions in the viewing area correspond to low light conditions (column 3 line 56 – column 4 line 61).

- 26. Claim 51 is rejected under the same analysis as claim 1.
- 27. Claim 52 is rejected under the same analysis as claim 2.
- 28. Claim 55 is rejected under the same analysis as claim 7.
- 29. Claim 58 is rejected under the same analysis as claim 16.
- 30. Claim 59 is rejected under the same analysis as claim 17.
- 31. Claim 60 is rejected under the same analysis as claim 26.

32. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

33. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

34. Claims 3, 4, 53 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (US Patent 5,982,423) in view of Yasuda (US 2001/0000674 A1).

35. With regard to claim 3 Sekiguchi discloses the imaging system according to claim 2 but fails to disclose wherein the output is a gain determined by an Automatic Gain Control.

Yasuda discloses that the gain of an Automatic Gain Control (AGC) corresponds to the light level of the image being taken (paragraph [0077]).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the AGC of Yasuda in order to provide a explicit method of determining the luminance level of the viewing area. Sekiguchi discloses moving the filter in and out of the optical path based upon the light level but does not disclose how that light

level is determined. Using the correlation of the AGC and the light level taught by Yasuda would provide a value that could be used to distinctly determine whether the light had fallen into low light conditions or not.

36. With regard to claim 4 Sekiguchi discloses the imaging system according to claim 2 but fails to disclose wherein the output is a value representative of a gain determined by an Automatic Gain Control.

Yasuda discloses wherein the output is a value representative of a gain determined by an Automatic Gain Control (paragraph [0077]).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the AGC of Yasuda in order to provide a explicit method of determining the luminance level of the viewing area. Sekiguchi discloses moving the filter in and out of the optical path based upon the light level but does not disclose how that light level is determined. Using the correlation of the AGC and the light level taught by Yasuda would provide a value that could be used to distinctly determine whether the light had fallen into low light conditions or not.

37. Claim 53 is rejected under the same analysis as claim 3.

38. Claim 54 is rejected under the same analysis as claim 4.

39. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (US Patent 5,982,423) in view of Uchiyama et al. (US Patent 7,170,547).

40. With regard to claim 5 Uchiyama et al. disclose the imaging system according to claim 2 but fail to disclose wherein the output is an exposure.

Uchiyama et al. disclose wherein the output is an exposure (column 7 lines 6-21).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the exposure of Uchiyama et al. in order to provide a explicit method of determining the luminance level of the viewing area. Sekiguchi discloses moving the filter in and out of the optical path based upon the light level but does not disclose how that light level is determined. Using the correlation of the exposure and the light level taught by Uchiyama et al. would provide a value that could be used to distinctly determine whether the light had fallen into low light conditions or not.

41. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (US Patent 5,982,423) in view of Tanii (JP 01105686 A).

42. With regard to claim 6 Sekiguchi discloses the imaging system according to claim 2 but fails to disclose wherein the output is a white balance.

Tanii discloses wherein the output is a white balance (abstract).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the white balance of Tanii in order to provide an explicit method of determining the luminance level of the viewing area. Sekiguchi discloses moving the filter in and out of the optical path based upon the light level but does not disclose how that light level is determined. Using the correlation of the white balance and the light level taught by Tanii would provide a value that could be used to distinctly determine whether the light had fallen into low light conditions or not.

43. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (US Patent 5,982,423) in view of Levine et al. (US Patent 4,695,878).

44. With regard to claim 11 Sekiguchi discloses the imaging system according to claim 10 but fails to disclose further comprising a solenoid that moves the infrared filter between the first position and the second position.

Levine et al. discloses comprising a solenoid that moves the infrared filter between the first position and the second position (solenoid 40, FIG. 1, column 3 line 46 –column 4 line 20).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the solenoid of Levine et al. in order to move the filter in and out of the optical path. Sekiguchi, while teaching moving the filter in and out of the optical path does not teach the precise method on how to perform the function. Levine et al. teaches a specific method of moving the filter and thus would be beneficial for knowing a workable method for moving the filter.

45. With regard to claim 12 Sekiguchi discloses the imaging system according to claim 1, but fail to disclose wherein the infrared filter is manually moved between the first position and the second position.

Levine et al. discloses wherein the infrared filter is manually moved between the first position and the second position (switch 38, FIG. 1, column 2 lines 37-44).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the manual switch of Levine et al. in order to provide a method of allowing the user to manually control the use of the IR filter. This would be beneficial because there may be times when the system does not detect low light conditions and

yet the taken image is still not easily recognizable. Thus including a manual control would allow the user to force the system to perform IR imaging anytime the system may not automatically switch but it would still be beneficial.

46. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (US Patent 5,982,423) in view of Ehrhart (US Patent 6,942,151).

47. With regard to claim 19 Sekiguchi discloses the imaging system according to claim 15, but fail to disclose wherein the light emitting diode is a white light emitting diode.

Ehrhart discloses wherein the light emitting diode is a white light emitting diode (column 6 lines 1-30).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the white light emitting diode taught by Ehrhart in order to create high quality images when additional light may be beneficial (column 6 lines 1-30).

48. With regard to claim 20 Sekiguchi discloses the imaging system according to claim 15, but fail to disclose wherein the light emitting diode is a colored light emitting diode.

Ehrhart discloses wherein the light emitting diode is a colored light emitting diode (column 6 lines 1-30).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the colored light emitting diode taught by Ehrhart in order to create high quality images when additional light may be beneficial (column 6 lines 1-30).

49. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (US Patent 5,982,423) in view of Kakinami et al. (US Patent 6,172,600).

50. With regard to claim 21 Sekiguchi discloses the imaging system according to claim 16 but fail to disclose wherein the vehicle comprises a license plate lightbar, and the supplemental illumination system is mounted to the lightbar.

Kakinami et al. discloses wherein the vehicle comprises a license plate lightbar, and the supplemental illumination system is mounted to the lightbar (light emitting diodes 21-26, FIG. 3, column 2 lines 41-53).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the license plate lightbar of Kakinami et al. in order to light and capture images from the rear of a vehicle (Kakiname et al, column 1 lines 30-45).

51. Claims 22, 23, 25, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (US Patent 5,982,423) in view of Bauer et al. (US Patent 6,550,949).

52. With regard to claim 22 Sekiguchi discloses the imaging system according to claim 16 but fails to disclose wherein the vehicle comprises a center high mount stop lamp, and the supplemental illumination system is mounted to the center high mount stop lamp.

Bauer et al. disclose wherein the vehicle comprises a center high mount stop lamp, and the supplemental illumination system is mounted to the center high mount stop lamp (column 3 lines 37-40, column 11 lines 25-53, column 14 lines 24-59).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the stop lamp of Bauer et al. in order to allow a

user to capture images from the rear of a vehicle in order to increase safety especially when heavily tinted rear windows are installed in the vehicle (column 1 lines 22-45).

53. With regard to claim 23 Sekiguchi discloses the imaging system according to claim 16 but fails to disclose wherein the vehicle comprises at least one tail lamp, and the supplemental illumination system is mounted to the at least one tail lamp.

Bauer et al. disclose wherein the vehicle comprises at least one tail lamp, and the supplemental illumination system is mounted to the at least one tail lamp (column 3 lines 37-40, column 11 lines 25-53, column 15 lines 4-35).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the stop lamp of Bauer et al. in order to allow a user to capture images from the rear of a vehicle in order to increase safety especially when heavily tinted rear windows are installed in the vehicle (column 1 lines 22-45).

54. With regard to claim 25 Sekiguchi discloses the imaging system according to claim 16 but fails to disclose wherein the at least one light source is directed rearwardly of the vehicle.

Bauer et al. disclose wherein the at least one light source is directed rearwardly of the vehicle (column 3 lines 37-40, column 11 lines 25-53, column 14 lines 24-59, and column 15 lines 4-35).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the stop lamp of Bauer et al. in order to allow a user to capture images from the rear of a vehicle in order to increase safety especially when heavily tinted rear windows are installed in the vehicle (column 1 lines 22-45).

55. With regard to claim 28 Sekiguchi discloses the imaging system according to claim 1 but fails to disclose wherein the image sensor is a complimentary metal oxide semiconductor.

Bauer et al. disclose wherein the image sensor is a complimentary metal oxide semiconductor (column 6 lines 39-51).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the CMOS sensor of Bauer et al. in order to provide a functional equivalent that is a well known replacement to the CCD sensor used in Sekiguchi.

56. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (US Patent 5,982,423).

57. With regard to claim 29 Sekiguchi discloses the imaging system according to claim 1 but fails to disclose wherein the infrared radiation comprises wavelengths between about 700 nm and 1 mm.

Examiner takes Official Notice that it is Old and Well Known that infrared radiation includes wavelengths from about 700 nm to about 1 mm.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the Old and Well Known range of infrared radiation in order to provide a specific wavelength range to filter for in order to omit the infrared.

58. With regard to claim 30 Sekiguchi disclose the imaging system according to claim 1 but fails to disclose wherein the infrared radiation comprises near-infrared radiation.

Examiner takes Official Notice that it is Old and Well Known that infrared radiation includes near-infrared radiation.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the system of Sekiguchi to include the Old and Well Known inclusion of near-infrared radiation in the infrared radiation in order to ensure that the filtered infrared radiation includes near-infrared which may distort the image as well.\

Allowable Subject Matter

59. Claims 8, 9, 56, and 57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

60. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach nor make obvious that the second threshold is greater than the first threshold.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADAM L. HENDERSON whose telephone number is (571)272-8619. The examiner can normally be reached on Monday-Friday, 7am to 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALH
17 April 2008

*/Ngoc-Yen T. VU/
Supervisory Patent Examiner, Art Unit 2622*